

CLAIMS LISTING:

1. (Currently Amended) A system for determining a linear combination of structured cash flow exchanges having a net present value of substantially zero comprising a digital information storage medium, the medium further comprising data representing processor instructions that operate on data corresponding to ~~representing~~ a graph having at least one node corresponding to at least one swap and produce data representing the maximum flow for the graph.
2. (Currently Amended) A system for determining a linear combination of structured cash flow exchanges having a net present value of substantially zero comprising a digital information storage medium, the medium further comprising data representing processor instructions that operate on data corresponding to ~~representing~~ a graph having at least one node corresponding to at least one swap and produce data representing the minimum cut of the graph.
3. (Currently Amended) A system for determining a linear combination of transactions, comprising a one or more digital information storage ~~media~~ ~~medium~~, the one or more media ~~medium~~ further comprising data representing processor instructions for:
 - (A)-adding information corresponding to a node ~~representing a selected transaction to a data structure corresponding to a graph, the node corresponding to a possible swap transaction;~~
 - (B) for each node in the graph:
 - querying one or more data sources for one or more transactions that at least partially match a transaction repository for each matching transaction that is a partial match for the requirements of the possible swap transaction corresponding to ~~represented by~~ the node;
 - adding information to the data structure corresponding to a second node, the second node corresponding to at least one transaction at least partially matching the query requirements ~~nodes representing each matching transaction to a graph;~~
 - adding information to the data structure corresponding to ~~a directed~~ an arc from the node to one or more nodes corresponding to transactions that at least partially match each node

~~representing another transaction that is a partial match for the requirements of the possible swap~~
transaction represented by the node;

~~(C) repeating steps A and B until the graph contains nodes representing every transaction~~
~~in the transaction repository that is a partial match for the requirements of a transaction~~
~~represented by a node in the graph;~~

~~(D) determining one or more values corresponding to the maximum flow on the graph.~~

4-11. (Canceled)

12. (Currently Amended) A method for determining a set of ~~offsetting~~ structured cash flows for exchange, comprising:

establishing in one or more memories a data structure corresponding to a ~~transaction~~
graph having nodes corresponding to for a collection of at least partial exchange definitions
including at least one at least partial swap definition;

~~the transaction graph having edges~~ a portion of the data structure corresponding to at
least one edge between exchange definitions having at least partially compatible terms;

the at least partially compatible terms including at least one of:

- an underlying,
- a start date,
- an end date,
- a variance;

determining data corresponding to a linear combination of edges corresponding to a
maximum notional amount for the graph with respect to one or more exchange definitions.

13-24. (Canceled)

25. (New) A system for determining a linear combination of structured cash flow exchanges comprising a digital information storage medium, the medium further comprising data representing processor instructions that operate on data corresponding to a graph having at least one edge corresponding to at least one partial match between one or more terms of at least one swap transaction and one or more terms of at least one other transaction and produce data representing the maximum flow for the graph.

26. (New) A system for determining a linear combination of structured cash flow exchanges comprising a digital information storage medium, the medium further comprising data representing processor instructions that operate on data corresponding to a graph having at least one edge corresponding to at least one partial match between one or more terms of at least one swap transaction and one or more terms of at least one other transaction and produce data representing the minimum cut of the graph.

27. (New) A system for determining a linear combination of structured cash flow exchanges, comprising one or more digital information storage media, the one or more media further comprising data representing processor instructions for:

- adding information corresponding to a node to a data structure corresponding to a graph, the node corresponding to a possible transaction;

- querying one or more data sources for one or more transactions that at least partially match the requirements of the transaction corresponding to the node;

- adding information to the data structure corresponding to a second node, the second node corresponding to at least one transaction at least partially matching the query requirements;
- adding information to the data structure corresponding to an arc from the node to one or more nodes corresponding to transactions that partially match the requirements of the transaction represented by the node;

- determining one or more values corresponding to the maximum flow on the graph;

- wherein the graph includes at least one arc corresponding to at least a partial match of the requirements of at least one swap.

28. (New) A method for determining a set of structured cash flow exchanges, comprising:
- establishing in one or more memories a data structure corresponding to a graph having nodes corresponding to a collection of at least partial cash flow definitions;
 - a portion of the data structure corresponding to one or more edges between at least two at least partial cash flow definitions having at least partially compatible terms;
 - at least one of the edges corresponding to at least a partial match of one or more requirements of a swap transaction;
 - the at least partially compatible terms including at least one of:
 - an underlying,
 - a start date,
 - an end date,
 - a variance;
 - determining data corresponding to a linear combination of edges corresponding to a maximum notional amount for the graph with respect to one or more swap definitions.